

Veterinary Science: Veterinary Assistant

Levels: Grades 11-12
Units of Credit: 2 Year (2.0 – 360 hours)
CIP Code: 02.0231
Prerequisite: Biology

COURSE DESCRIPTION

This course provides the opportunity for students to explore different avenues of the veterinary profession. Students will be exposed to veterinary science and principles which include anatomy, physiology, chemistry, animal health and disease, dentistry and laboratory procedures. Students will provide hands-on care as they develop skills in the areas of surgical assisting, bandaging, wound care, oral care, and general nursing care.

CORE STANDARDS, OBJECTIVES, AND INDICATORS

STANDARD

02-0231-01 Students will understand the role of FFA/HOSA in Agricultural Education

OBJECTIVES

- 02-0231-0101 Students will explain the purpose of leadership opportunities associated with FFA/HOSA
- 02-0231-0102 Students will have the opportunity to participate in both veterinarian-related and leadership events with FFA/HOSA
- 02-0231-0103 Students will understand the professionalism requirements related to FFA/HOSA participation.
- 02-0231-0104 Students will be able to describe how FFA/HOSA develops leadership skills, personal growth, and career success.
- 02-0231-0105 Students will understand the history and organization of FFA/HOSA.

02-0231-02 Students will participate in a Supervised Agricultural Experience (SAE) program.

OBJECTIVES

- 02-0231-0201 Students will prepare for an externship opportunity by developing skills that will be used in the veterinary clinic.
- 02-0231-0202 Students will understand the level of professionalism required for participation in an externship portion of the program. This includes appropriate dress, grooming, attitude, and performance.
- 02-0231-0203 Students will pass off required skills while working at their externship site.
- 02-0231-0204 Students will develop excellent professionalism, work skills, and work habits during the externship experience

02.0231-03 Students will demonstrate an understanding of safe practices in the clinical setting.

OBJECTIVES

- 02.0231-0301 Students will gain an understanding of appropriate infection control practices.
- 02.0231-0302 Students will correctly demonstrate infection control practices, such as handwashing, gowning, gloving, and masking.
- 02.0231-0303 Students will explain steps that need to be taken to avoid cross-contamination between animals.
- 02.0231-0304 Students will learn to follow safe practices at all times to avoid injury to themselves or others.
- 02.0231-0305 Students will demonstrate appropriate handling and disposal of biohazardous waste.
- 02.0231-0306 Students will demonstrate appropriate use and disposal of needles and other sharps.

02.0231-04 Students will demonstrate an understanding of medical terminology, in order to be able to appropriately discuss and read medical information.

OBJECTIVES

- 02.0231-0401 Students will be able to define medical terms related to each body system.
- 02.0231-0402 Students will be able to identify prefixes, suffixes, and root words, in order to define medical terms.
- 02.0231-0403 Students will be able to interpret and extract information from realistic medical documents.
- 02.0231-0404 Students will interpret and apply medical abbreviations and symbols.

02.0231-05 Students will demonstrate an understanding of animal anatomy and physiology.

OBJECTIVES

- 02-0231-0501 Students will dissect preserved cats, or other appropriate animals, in order to gain an understanding of animal anatomy and physiology.
- 02-0231-0502 Students will be able to correctly identify superficial muscles that are involved in the movement of an animal.
- 02-0231-0503 Students will learn the bones in the body and be able to identify them on skeletal models.
- 02-0231-0504 Students will be able to identify various body parts and organs.
- 02-0231-0505 Students will be able to compare the anatomy of different species of animals, to include small animals, large animals, laboratory animals, and exotic animals.
- 02-0231-0506 Students will be able to describe the basic physiology involved in the functioning of each body system.

02-0231-06 Students will explore concepts in health management and disease.

OBJECTIVES

- 02-0231-0601 Students will know the common vaccines, how to administer the vaccines, and when to give them.
- 02-0231-0602 Students will identify and describe common animal diseases.
- 02-0231-0603 Students will understand the purposes of basic treatments for common animal diseases.
- 02-0231-0604 Students will demonstrate the ability to provide treatments for common animal diseases.
- 02-0231-0605 Students will identify medications used to treat common animal diseases.
- 02-0231-0606 Students will know the common zoonotic diseases and the precautions needed to prevent these diseases.

02-0231-07 Students will express an understanding of the fundamental principles of veterinary medicine and be able to demonstrate proficiency in each area.

OBJECTIVES

- 02-0231-0701 Students will study and develop an understanding of animal behavior.
- 02-0231-0702 Students will understand the principles of restraint/handling techniques and be able to demonstrate safe restraint/handling practices on small, exotic, and large animals.
- 02-0231-0703 Students will be able to correctly perform breed identification.
- 02-0231-0704 Students will be able to accurately take a preliminary history from a client and perform a basic physical examination, to include vital signs and other necessary assessments.
- 02-0231-0705 Students will know the basic nutritional requirements for each species of animal.
- 02-0231-0706 Students will be able to accurately assess wounds and provide appropriate wound care and management.
- 02-0231-0707 Students will know the materials needed and how to apply common splints, casts, and bandages on animals.

02-0231-08 Students will develop a basic understanding of medication administration.

OBJECTIVES

- 02-0231-0801 Students will be able to name common medications used in veterinary practice.
- 02-0231-0802 Students will be able to demonstrate appropriate administration of oral, topical, and injectable medications.
- 02-0231-0803 Students will be able to demonstrate how to correctly determine appropriate medication dosages.
- 02-0231-0804 Students will be able to recognize and know how to treat adverse effects of medications.
- 02-0231-0805 Students will be able to identify contraindications for administering certain medications.

02-0231-09 Students will demonstrate proficiency in the office procedures related to veterinary practice.

OBJECTIVES

- 02-0231-0901 Students will appropriately demonstrate the ability to communicate with and educate clients.
- 02-0231-0902 Students will demonstrate appropriate telephone etiquette.
- 02-0231-0903 Students will demonstrate accurate record keeping and filing.
- 02-0231-0904 Students will understand OSHA standards and be able to demonstrate safe practices in the veterinary setting.
- 02-0231-0905 Students will demonstrate the ability to accurately complete health certificates and medical forms.
- 02-0231-0906 Students will demonstrate appropriate job seeking skills.
- 02-0231-0907 Students will demonstrate an understanding of euthanasia procedures and the ability to provide grief support.

02-0231-10 Students will study and demonstrate the ability to perform surgical procedures while maintaining sterile technique.

OBJECTIVES

- 02-0231-1001 Students will verbalize understanding of surgical and aseptic principles.
- 02-0231-1002 Students will be able to accurately identify surgical instruments.
- 02-0231-1003 Students will correctly demonstrate preparation for surgical procedures, to include preparing and sterilizing equipment and preparing the patient for surgery.
- 02-0231-1004 Students will demonstrate an understanding of how to maintain a sterile zone during surgery.
- 02-0231-1005 Students will demonstrate the ability to assist with common surgical procedures.
- 02-0231-1006 Students will be able to perform basic suture patterns.

02-0231-11 Students will study and demonstrate an ability to perform laboratory procedures.

OBJECTIVES

- 02-0231-1101 Students will demonstrate an understanding of concepts and the ability to perform skills related to microbiology.
- 02-0231-1102 Students will demonstrate an understanding of concepts and the ability to perform skills related to hematology.
- 02-0231-1103 Students will demonstrate an understanding of concepts and the ability to perform skills related to parasitology.
- 02-0231-1104 Students will demonstrate an understanding of concepts and the ability to perform skills related to urinalyses and other animal laboratory tests.

02-0231-12 Students will demonstrate an ability to identify, treat and manage exotic and laboratory animals.

OBJECTIVES

02-0231-1201 Students will correctly identify exotic and laboratory animals.

02-0231-1202 Students will be able to identify the care required by various exotic and laboratory animals.

02-0231-1203 Students will know the husbandry requirements for common exotic and laboratory animals.

02-0231-1204 Students will be able to identify common problems seen in the exotic and laboratory species.

02-0231-13 Students will study and prepare for career opportunities in Veterinary science.

OBJECTIVES

02-0231-1301 Students will match interests and aptitudes to an occupational area.

02-0231-1302 Students will develop goals related to future employment.

02-0231-1303 Students will obtain education needed for a job.

02-0231-1304 Students will identify occupational competencies.

02-0231-1305 Students will identify schooling requirements that must be met in order to prepare for future employment.

02-0231-1306 Students will create a resume and develop interviewing skills, essential to obtaining a position in the veterinary field.

02-0231-14 Students will study and understand the various disciplines in the field of veterinary medicine.

02-0231-1401 Students will understand the skills needed and career options available in the field of veterinary dentistry.

02-0231-1402 Students will understand the skills needed and career options available in the field of veterinary pediatrics.

02-0231-1403 Students will understand the skills needed and career options available in the field of veterinary geriatrics.

02-0231-1404 Students will understand the skills needed and career options available in the field of veterinary immunology.

02-0231-15 Students will express an understanding of veterinary laws and ethics.

OBJECTIVES

02-0231-1501 Students will understand the laws that govern veterinary medicine.

02-0231-1502 Students will recognize the legality of the veterinary-client-patient relationship.

02-0231-1503 Students will be able to identify the various associations available in the veterinary field.

- 02-0231-1504 Students will understand the laws governing animal abuse and know how to appropriately report cases of animal abuse.
- 02-0231-1505 Students will demonstrate an understanding of veterinary laws and ethics by analyzing case studies and identifying how laws and rules apply to these cases.